

According to the most recent available information, infection with human immunodeficiency virus (HIV), the virus that causes acquired immunodeficiency syndrome (AIDS), is the leading cause of death among New Jersey adults in their 30's and early 40's and the fifth leading cause of death among New Jersey residents overall. Similar to cancer, HIV currently contributes about 15% of the years of potential life lost before age 65 in New Jersey¹.

More than half of all cases of AIDS in New Jersey have been ascribed to needle sharing among injection drug abusers (mostly males) and another 25% have been ascribed to homosexual transmission among males in general. Recently, however, there appears to be a decline in the proportion of cases directly attributable to needle sharing and a concomitant increase in the proportion attributable to heterosexual transmission, approaching that of homosexual transmission. At the same time, the proportion of new cases diagnosed among females has increased, now reaching over 30%².

Education of the general public is one important aspect of a comprehensive HIV abatement campaign³. The New Jersey Behavioral Risk Factor Surveillance System (BRFSS) provides an opportunity to estimate directly the prevalence of certain types of knowledge and attitudes among New Jersey adults concerning the prevention, detection, and treatment of AIDS. A separate set of questions on sexual behavior which was added to the BRFSS in 1997 is expected to enhance greatly the utility of this information, by providing a better interpretive context for the existing questions⁴.

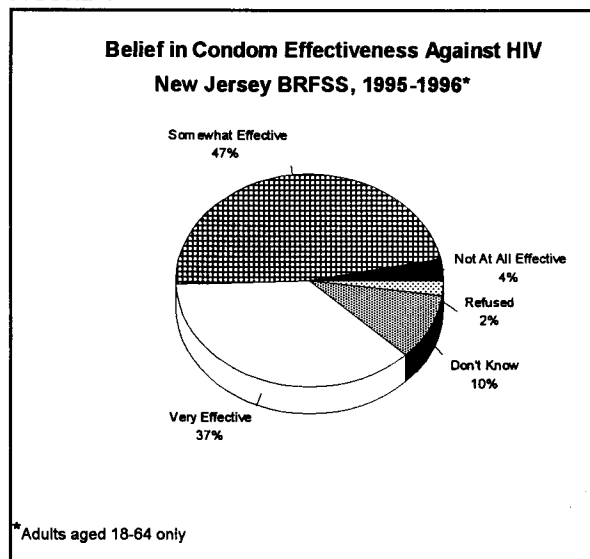
NOTE: The New Jersey Behavioral Risk Factor Surveillance System is part of the national Behavioral Risk Factor Surveillance System, a telephone survey of adults aged 18 years and over. This survey is designed to monitor modifiable risk factors for chronic diseases and other leading causes of morbidity and death. The survey is a cooperative effort between the national Centers for Disease Control and Prevention (CDC) and all states, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. It has been in existence since 1984. The New Jersey Department of Health and Senior Services has been participating in the survey on a monthly basis since 1991, collecting approximately 1,500 interviews per year through 1995 and nearly twice that number in 1996. General design features and limitations of the BRFSS have been discussed elsewhere.^{5,6}

Prevention

Despite the apparent beneficial impact of new HIV therapies, prevention of HIV transmission remains the fundamental means of battling the AIDS epidemic⁷. Accurate information about how HIV is transmitted is essential not only to facilitate prevention, but also for informed public debate about policy. Over the years of its existence, the New Jersey BRFSS has included a number of questions examining the knowledge of New Jersey adults concerning the mechanism of HIV transmission, as well as their attitudes towards the education of younger people about prevention of HIV infection.

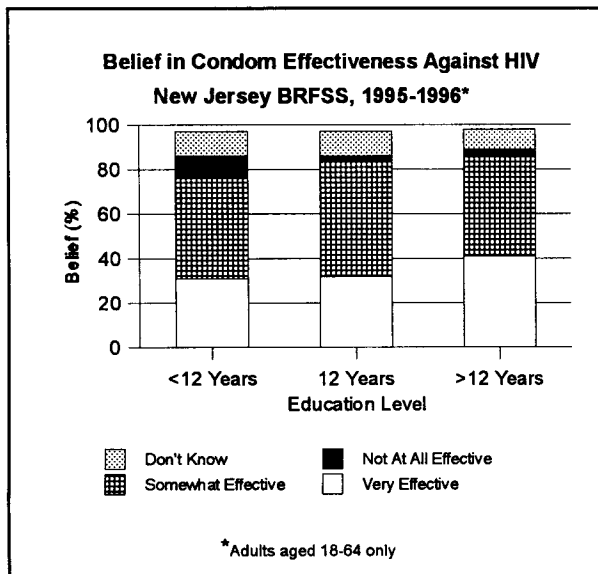
Most New Jersey adults aged 18-64 believe that a properly used condom is at least somewhat effective against sexual transmission of HIV (Figure 1). The

FIGURE 1



estimated percentage of adults aged 18-64 who believed that a properly used condom is "very effective" against infection with HIV through sexual activity (34-41%*) was significantly higher than the median for all reporting states in 1995 (32%)⁸. However, belief in the effectiveness of condoms depends somewhat on education level (Figure 2). Multivariable analyses (not shown) also suggest that belief in the efficacy of condoms remains significantly lower

FIGURE 2



among females than among males, and declines somewhat with age, at all levels of education.

Survey results from earlier in the decade indicated that many New Jersey adults had a variety of misperceptions and/or prejudices concerning other aspects of HIV infection (Figure 3). The estimated percentages of adults with

FIGURE 3

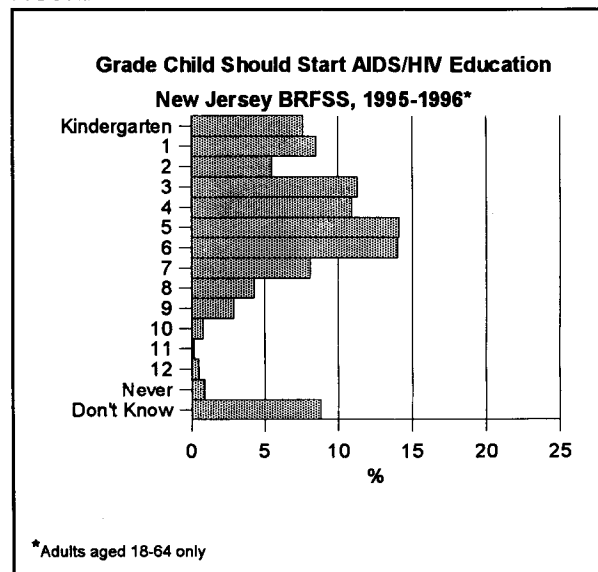
Negative Beliefs/Attitudes About HIV Transmission New Jersey BRFSS*	
Would not eat in restaurant where cook is infected with AIDS virus (1991-1992)	64% (15%)**
Believe one can get AIDS virus by giving blood (1991-1992)	35% (6%)
Would not allow child to be in same class as child infected with AIDS virus (1994)	15% (17%)
Would not work with person who is infected with AIDS virus (1991-1994)	14% (12%)
Don't believe pregnant woman with AIDS virus can give it to baby (1991-1992)	2% (7%)
*Adults aged 18-64 only. **Numbers in parentheses represent "Don't Know" responses.	

selected beliefs and attitudes about HIV transmission were similar to those in other states during those years, except for the percentage who believe one can get "infected with AIDS from being cared for by a nurse, doctor, or other health care worker who has the AIDS virus" (60%), which was significantly lower in New Jersey than the median for all reporting states (69%), in 1992⁹.

About 72% of New Jersey adults aged 18-64 believe that children should have some form of education in school "about HIV infection and AIDS" by the time they reach the

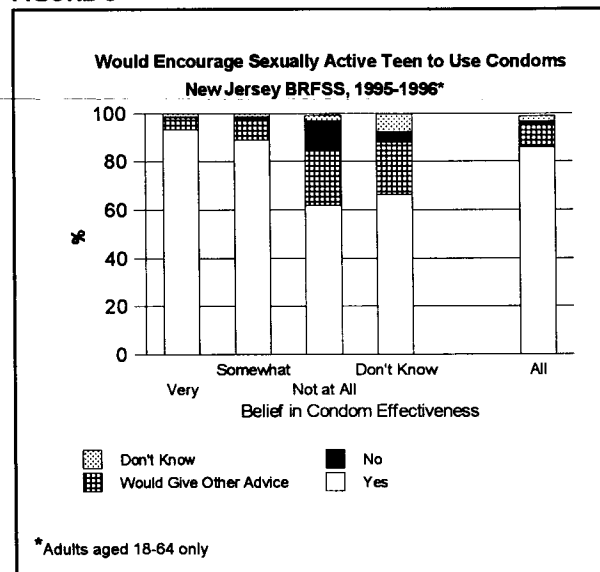
junior high school level (Figure 4). In addition, an estimated 85% of adults aged 18-64 would encourage a teenager

FIGURE 4



who was sexually active to use a condom while about 10% would not, or would give other advice. These results are similar to the medians from all reporting states in 1995⁸. However, among those who considered condoms to be "not at all effective" or didn't know how effective they were, approximately 28% (23%-34%) would not encourage a sexually active teenager to use a condom or would give other advice (Figure 5). Over half of all adults who would not encourage a sexually active teenager to use a condom also believe that condoms are not effective, or don't know how effective they are, according to the New Jersey BRFSS.

FIGURE 5



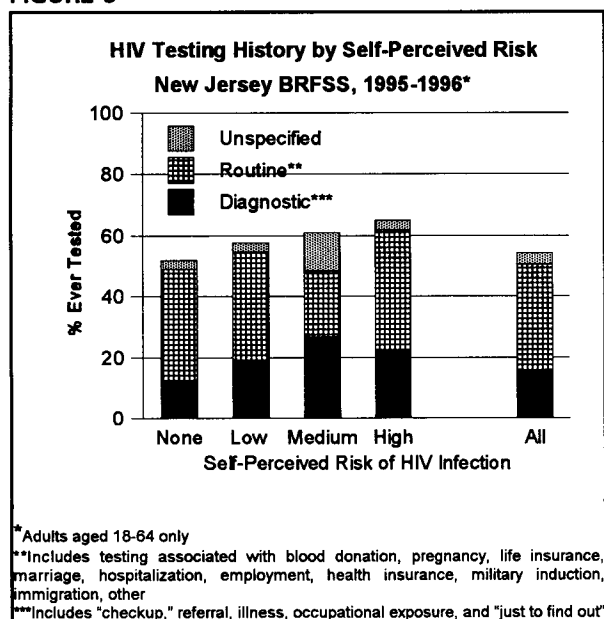
Detection

Evidence suggests that in many persons HIV infection goes undetected until AIDS is diagnosed¹⁰. Early detection is important to ensure that infected individuals obtain optimum benefit from available therapies as well as to facilitate partner notification. The testing process itself also provides an important educational opportunity for high risk individuals³.

As of 1993, only about 9% of New Jersey adults aged 18-64 believed that you could "tell by looking at a person if he or she has the AIDS virus", although another 6% were not sure. However, results from the previous two years suggest that about 8% of adults aged 18-64 did not know any place where they could be tested for HIV, and another 16% did not know any place other than a private physician or hospital.

Overall, as of 1996, approximately 55% of New Jersey adults aged 18-64 had ever been tested for HIV or had donated blood since 1985. The estimated prevalence of testing is somewhat related to self-perceived risk of getting infected (Figure 6). Excluding blood donations, however,

FIGURE 6

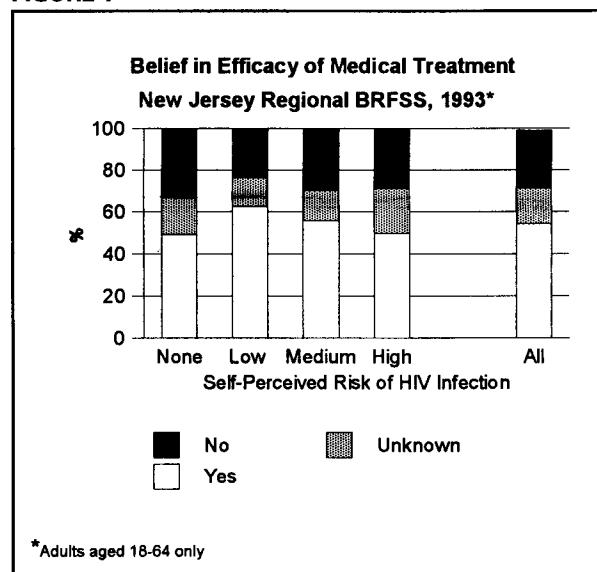


only about 45% of New Jersey adults aged 18-64 had ever been tested for HIV as of 1996, regardless of whether self-perceived risk of acquiring HIV was "high", "moderate", or "low", and the overall prevalence of testing (including adults whose self-perceived risk of HIV infection was "none" or unknown), was only about 40%. The overall prevalence of testing in New Jersey was not significantly higher than the median for all reporting states in 1995, the most recent year for which data are available⁸.

Treatment

Knowledge of available treatment could be an important motivational factor for testing. As of 1993, only about 54% of New Jersey adults aged 18-64 believed that available medical treatment could lengthen the life of a person with AIDS. Moreover, persons with a high self-perceived risk of infection tended to show slightly less conviction about the efficacy of treatment than those with a low or moderate self-perceived risk (Figure 7).

FIGURE 7



*Prevalence estimates given as ranges in this report represent approximate 95% confidence intervals for the underlying population-based statistics, taking into account the random error introduced by sampling. These confidence intervals were calculated from variance estimates generated by the statistical software package SUDAAN, used for surveys such as the BRFSS which incorporate complex sampling designs¹¹. Where a 95% confidence interval is not presented, the margin of sampling error (computed as the standard error of the estimate multiplied by 1.96) is expected to be less than 3%.

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This report was prepared by Kenneth J. O'Dowd, Ph.D.
For further information on the methods used to collect and analyze these data, please contact:

Center for Health Statistics
New Jersey Department of Health and Senior Services
PO Box 360
Trenton, NJ 08625-0360

Telephone: (609) 984-6702